

SAFETY DATA SHEET

7001

Product Name **KOSTROLITH 5AK**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name BOC LIMITED (AUSTRALIA)
Address 10 Julius Avenue, North Ryde, NSW, AUSTRALIA, 2113
Telephone 131 262, (02) 8874 4400
Fax 132 427 (24 hours)
Emergency 1800 653 572 (24/7) (Australia only)
Web Site <http://www.boc.com.au/>
Synonym(s) 7001 - SDS NUMBER • KOSTROLITH 5AK, 1.6-2.5MM • KOSTROLITH 5AK2 • KOSTROLITH MOLECULAR SIEVES OF TYPE 5A (CANAA, CAA)
Use(s) MOLECULAR SIEVE
SDS Date 13 Jul 2010

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN No. None Allocated **DG Class** None Allocated **Subsidiary Risk(s)** None Allocated
Packing Group None Allocated **Hazchem Code** None Allocated

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
ZEOLITE	Not Available	1318-02-1	>60%

4. FIRST AID MEASURES

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability Non flammable. May evolve toxic gases if strongly heated.

Fire and Explosion Heating of drums filled with the product may lead to their explosion as a result of the rapid rise in pressure, resulting in spontaneous nitrogen desorption. The heat development that occurs if the material interacts directly with extinguishing water can result in a maximum temperature of 60 K and is therefore insignificant in normal circumstances.

Product Name	KOSTROLITH 5AK
Extinguishing	Use extinguishing media to suit materials in the surrounding area. Prevent contamination of drains or waterways.
Hazchem Code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spillage	If spilt (bulk), use personal protective equipment. Ventilate area where possible. Contain spillage, then collect and place in suitable containers for disposal. Avoid generating dust.
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7. STORAGE AND HANDLING

Storage	Store in a cool, dry, well ventilated area, removed from oxidising agents, acids and foodstuffs. Ensure containers are adequately labelled. Store between 0°C and 40°C. Do not store outdoors, or in the event of temporary storage outdoors, protect against precipitation by using water tight tarpaulin or similar.
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Std's	A general exposure limit of 4 mg/m ³ is the manufacturer's recommendation for zeolite dust.
Biological Limits	No biological limit allocated.
Engineering Controls	Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.
PPE	Wear dust-proof goggles and PVC or rubber gloves. When using large quantities or where heavy contamination is likely, wear: coveralls. Where an inhalation risk exists, wear: a Class P1 (Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	WHITE TO RED/BROWN GRANULAR SOLID	Solubility (water)	INSOLUBLE
Odour	ODOURLESS	Specific Gravity	0.68 to 0.78
pH	9 to 11 (5 % solution)	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	NOT RELEVANT	Upper Explosion Limit	NOT RELEVANT
Melting Point	> 1000°C	Lower Explosion Limit	NOT RELEVANT
Evaporation Rate	NOT AVAILABLE		
Decomposition Temperature	> 600°C		

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended conditions of storage.
Conditions to Avoid	The product absorbs considerable quantities of nitrogen. The absorbed quantity drops quickly as the temperature increases. This may cause a vacuum at low temperatures or pressure at high temperatures. When it reacts with water the product releases a great deal of heat, but the maximum temperature is limited to 60 K.
Material to Avoid	Incompatible with oxidising agents and acids (eg. nitric acid).
Hazardous Decomposition Products	May evolve toxic gases if heated to decomposition.
Hazardous Reactions	Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Low toxicity - irritant. Use safe work practices to avoid eye or skin contact and inhalation. This product is generally considered to be of low toxicity, however over exposure to dust should be avoided.
Eye	Irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation	Low irritant. Over exposure may result in irritation of the nose and throat, with coughing.
Skin	Irritant. Contact may result in irritation, redness, pain and rash.
Ingestion	Low toxicity. Ingestion of large quantities may result in nausea, vomiting and gastrointestinal irritation.
Toxicity Data	No LD50 data available for this product.

12. ECOLOGICAL INFORMATION

Environment	Not expected to cause harm to the environment.
Ecotoxicity	This product is neutral to the environment under normal conditions because of its chemical and biological inertness. Acidic media may cause chemical decomposition with the release of soluble aluminium salts and colloidal silicic acid. As a result of its ion exchange properties, the product may trap heavy metals.
Persistence / Degradability	No biological degradation of the product may be expected. The only degradation pathway known to date is slow hydrolysis, particularly in acidic media.
Mobility	No mobility of the material in the natural environment should be expected.

13. DISPOSAL CONSIDERATIONS

Waste Disposal	Ensure product is covered with moist soil to prevent dust generation and dispose of to approved Council landfill. Contact the manufacturer if additional information is required.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name	None Allocated			
UN No.	None Allocated	DG Class	None Allocated	Subsidiary Risk(s) None Allocated
Packing Group	None Allocated	Hazchem Code	None Allocated	

15. REGULATORY INFORMATION

Poison Schedule	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).
AICS	All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information	This product is manufactured by: Chemiewerk Bad Kostritz GmbH. Address: Heinrichshall 2, D-07586 Bad Kostritz, GERMANY Phone: +49 36605 81-0.
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ABBREVIATIONS:
 ADB - Air-Dry Basis.
 BEI - Biological Exposure Indice(s)
 CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
 CNS - Central Nervous System.
 EC No - European Community Number.
 IARC - International Agency for Research on Cancer.
 M - moles per litre, a unit of concentration.
 mg/m3 - Milligrams per cubic metre.
 NOS - Not Otherwise Specified.
 NTP - National Toxicology Program.
 OSHA - Occupational Safety and Health Administration.
 pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
 ppm - Parts Per Million.
 RTECS - Registry of Toxic Effects of Chemical Substances.
 TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

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It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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End of Report